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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,498	05/10/2001	Gary D. Jerdee	71163	7129

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EXAMINER
AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
1733	4

DATE MAILED: 10/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/852,498	JERDEE ET AL.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 9-21 is/are pending in the application.

4a) Of the above claim(s) 21 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 9-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 9-20, drawn to a method of making a carpet, classified in class 156, subclass 72.

II. Claim 21, drawn to a method of recycling carpet, classified in class 264, subclass 37.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions and different effects, namely the carpets of claims 9-20 would have been understood to have been recycled utilizing any number of recycling techniques including shredding of the carpet and reuse of the material in the shredded form. There additionally is no requirement that one extrude to recycle the carpet material at all.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mark Davis on 10-28-02 a provisional election was made with traverse to prosecute the invention of Group I, claims 9-20. Affirmation of this election must be made by applicant in replying to this Office action. Claim 21 has been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 9, 10, 12, 13, 15, 16, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taft et al further taken with either one of PCT 98/38376 or PCT 98/38375 and Ballard.

Taft et al suggested that it was known at the time the invention was made to form a carpet by tufting carpet fiber into a primary backing and joining this tufted primary backing to a secondary backing with an adhesive material which comprised an amorphous polyethylene copolymer which was either ethylene methyl acrylate or ethylene butyl acrylate. The applicant is

more specifically referred to column 1, lines 44-57, column 3, line 73-column 4, line 15 and column 4, lines 61-63 of Taft. In Taft et al, the carpet fibers were formed from wool, cotton rayon or nylon (column 1, lines 58-61) while the primary and secondary backings were formed from polypropylene or polyester, for example, column 1, lines 62-72. The reference suggested that a suitable manner for coating the primary backing subsequent to the tufting with the adhesive coating would have included extrusion coating, column 6, lines 70-column 7, line 2. The reference failed to make mention of the extrusion coating of the same wherein the tufted primary backing, the extruded adhesive and the secondary backing were fed into a nip formed by nip rollers wherein one roller was a rubber covered roller and the other roller was a hard chilled roller.

However, in the art of making carpets, it was notoriously well known at the time the invention was made to feed the tufted primary backing, the extruded adhesive and the secondary backing into a nip formed by rollers as evidenced by either one of PCT '376 or PCT '375. The references to PCT '375 (page 48, lines 3-30, Figure 7) and PCT '376 (page 48, lines 3-30, Figure 7) both suggested that the nip would have included a chill roll and a second roll. The references both suggested that an ethylene adhesive material would have been applied onto a primary backing prior to introduction into a nip where a secondary backing was also disposed. The references did not expressly suggest that the nip arrangement would have included a cooled hard roller and a soft rubber covered roller, however both references suggested that the size of the roller as well as the pressure applied by the roller would have been determined through routine experimentation.

The reference to Ballard suggested that it was known to join a primary backing which included tufted fibers thereon to a secondary backing with a thermoplastic adhesive in a nip which included a chilled roller and a rubber covered roller. More specifically, the applicant is referred to column 4, lines 32-column 5, line 30 for a general description of the nip 13 formed by the water chilled roller 15 (held at 50-55 degrees F) and the rubber covered roller 14 which was 6 inches in diameter. The references clearly suggested that one skilled in the art at the time the invention was made would have incorporated a roller nip arrangement for pressing a secondary backing to a primary backing with a thermoplastic adhesive there between wherein the adhesive would have suitably been provided by extrusion coating the adhesive material. It would have been obvious to utilize a nip for forming a joint between a primary backing and a secondary backing in a tufted carpet as the references to each of PCT 98/38376 or PCT 98/38375 suggested such manufacture when extruding the adhesive for the bond as the reference to Taft et al suggested such extrusion processing for providing the adhesive and the reference to Ballard suggested that a rubber covered roll as well as a chilled roll would have been used for forming the nip in the bonding arrangement.

9. Claims 11, 14, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 8 further taken with Kerr.

The references as set forth above clearly suggested that a roller nip would have been provided to facilitate the lamination of the primary backing and the secondary backing in the manufacture of a carpet wherein the specific adhesive composition was used to join the backings together and wherein the specified composition would have been applied via extrusion. The references additionally suggested that one skilled in the art would have utilized a rubber covered

roller and a hard chilled roll in the nip arrangement, however there is no specific disclosure as to the hardness of the rubber covering the roll in the nip arrangement. It should be noted that each of PCT '375 and PCT '376 suggested that those skilled in the art would have optimized the amount of pressure that was applied in order to attain the degree of bonding desired, for example. Kerr suggested that a roller nip would have included a hard roll 44 and a soft rubber roll 42 which was provided with a hardness for the rubber of between 40-80, preferably 50 Shore A (note that 40-80 Shore A is about 9-40 Shore D) so that the pressure on the carpet assembly would not have been too great as the assembly passed through the nip, see column 3, lines 58-64. It should be noted that Kerr was assembling layers which were extruded onto a tufted product. It should be noted that the specified size of the nip roller was suggested by Ballard. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a soft rubber roll as suggested by Kerr in the nip when joining a backing to a carpet (whereby the pressure applied would have been even and not excessive) in the process of laminating a backing to a carpet as suggested above in paragraph 8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
October 29, 2002